

# **FAN HAVING MAGNETIC LEVITATION BLADE ASSEMBLY**

## **ABSTRACT OF THE DISCLOSURE**

A fan includes a casing having a bottom wall and a shaft mounted inside the casing for rotatably supporting a rotary blade assembly comprised of blades inside the casing and above the bottom wall with the blade assembly being axially movable with respect to the shaft. A levitation device includes magnets mounted to the blades of the blade assembly and a magnetic field generator mounted in the bottom wall and opposing the magnets of the blades. The magnet field generator is controlled by a control circuit to selectively generate a magnetic field that interacts with the magnets of the blades to induce expelling force acting upon the blade assembly to axially move the blade assembly a predetermined distance away from the bottom wall. The magnitude of the expelling force can be changed by controlling the magnetic field generator whereby the distance between the blades and the bottom wall can be adjusted.